



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007C BYPASS RATIO: 5.3
 UNIQUE ID NUMBER: 3AL001 PRESSURE RATIO (π_{00}): 16.2
 COMBUSTOR: ENGINE TYPE: MTF RATED THRUST (F_{00}) (kN): 28.6

REGULATORY DATA **** DATA SUPERSEDED **** SEE FOLLOWING UID FOR REVISED DATA: **6AL021**

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	17.5	77.5	38.2	1.2
AS % OF ORIGINAL LIMIT	89.3	65.7	52.8	3.6
AS % OF CAEP/2 LIMIT (NO _x)			66.0	
AS % OF CAEP/4 LIMIT (NO _x)			66.4	
AS % OF CAEP/6 LIMIT (NO _x)			66.6	
AS % OF CAEP/8 LIMIT (NO _x)			70.4	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.280	0.29	0.97	16.92	1.0
CLIMB OUT	85	2.2	0.234	0.33	1.19	14.56	0.0
APPROACH	30	4.0	0.091	0.83	4.50	6.63	0.0
IDLE	7	26.0	0.039	5.84	29.88	3.24	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			125	387	1964	991	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				13.5	68.0	34.7	1.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.3
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.0063

FUEL

SPEC	Jet A/JP-8
H/C	1.9
AROM (%)	16.5

MANUFACTURER: Rolls-Royce Corporation
 TEST ORGANIZATION: Allison Engine Company
 TEST LOCATION: Indianapolis, Indiana
 TEST DATES: 03/03/1994-19/04/1995

REMARKS

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)